Geophysical Research Abstracts Vol. 17, EGU2015-7425, 2015 EGU General Assembly 2015 © Author(s) 2015. CC Attribution 3.0 License.



Some Examples of Photogrammetry for the Characterization of Rock Masses

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The presentation starts by briefly describing the basic elements of close-range photogrammetry, which are then used to understand its limitations, its accuracy, and its differences with respect to the LiDAR. Examples of applications will follow:

- Baseline model accurate to 1.5 cm for a sub-vertical slope (800 m wide and 450 m high) in a narrow canyon in Colorado.
- 3-D model for a 2.6 km long, 300 m high slope in Northern Italy. Its use for fracture mapping and analysis, and the determination of unstable blocks.
- Monitoring of a by-pass tunnel in a Hydroelectric Power Scheme in California, where a major shear zone creates water seepage and movements